

**UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION**

PIERCE MANUFACTURING, INC. and
OSHKOSH CORPORATION,

Plaintiffs,

v.

Case No: 8:18-cv-617-T-30TGW

E-ONE, INC. and REV GROUP, INC.,

Defendants.

ORDER

Pierce Manufacturing, Inc. and Oshkosh Corporation (“Pierce”) bring this patent action against E-One, Inc. and REV Group, Inc. (“E-One”) alleging infringement of patents for a particular fire truck design. At the outset of this case, Pierce successfully argued it was entitled to a preliminary injunction to prevent E-One from “making, using, selling, and offering to sell its” allegedly infringing fire truck.

Before the Court are several motions, including a motion to dissolve the preliminary injunction, cross motions for summary judgment, and a motion to exclude E-One’s expert witness. Having reviewed the motions, responses, and the law, the Court concludes all the motions are due to be denied. First, Pierce has not demonstrated that E-One’s expert’s opinions are unreliable or unhelpful, so the *Daubert* motion must be denied. Second, the conflicting expert opinions create factual issues that prevent entry of summary judgment. And because the basis of E-One’s motion to dissolve the preliminary injunction is also entangled with these disputed facts, the Court concludes that motion must also be denied.

BACKGROUND

A. Factual Background on Fire Truck Designs

This case involves two patents related to a “quint” configuration fire truck. A quint configuration fire truck includes these five features: (1) an aerial ladder, (2) a water tank, (3) ground ladders, (4) a water pump, and (5) hose storage.”

In 2012, Michael Moore, an employee of Pierce, conceived of a new quint design for a single rear axle fire truck. The new design included an aerial ladder that extended at least 95 feet vertically and 90 feet horizontally. When the ladder was extended 90 feet horizontally, the ladder was configured to support a 750-pound tip load. The design also included a water tank configured to contain at least 500 gallons of water. Moore worked with Pierce engineers to build his design, which Pierce named the Ascendant 107. Pierce unveiled the Ascendant 107 quint in Spring 2015.

Moore applied for two patents for his newly designed single rear axle quint that are at issue in this case: Patent No. 9,814,915 (the “915 Patent”) and Patent No. 9,597,536 (the “536 Patent”). The 536 Patent issued in March 2017, and the 915 Patent issued in November 2017.

Also in 2017, E-One introduced its Metro 100 single rear axle quint. The Metro 100 quint has an aerial ladder extensible to at least 95 feet vertically and 90 feet horizontally. The Metro 100 quint can also have a 500-gallon water tank, although not all Metro 100 quints are so configured. Finally, the Metro 100 quint has a National Fire Prevention Association (“NFPA”) rated tip load of 500 pounds when the ladder assembly is extended to 90 feet horizontally. NFPA standards require that an apparatus, such as the Metro 100,

have a stability factor of 1.5 times the rated tip load,¹ and that the aerial ladder have a structural safety factor of 2 times the rated tip load. The rated capacity must remain constant throughout the operating envelope of the aerial ladder.

E-One has made, used, sold, or offered for sale 38 Metro 100 quints.

B. Claims of Infringement and Defenses

Pierce claims the Metro 100 quint infringes the 536 and 915 Patents. More specifically, Pierce claims the Metro 100 quint infringes Claim 20 of the 536 Patent, and Claims 1–5 and 11–15 of the 915 Patent, with the majority of the Metro 100 quints (those that were configured with a 500-gallon water tank) also infringing claims 1–5 and 11–15 of the 536 Patent. That is because, according to Pierce, the Metro 100’s aerial ladder assembly is configured to support a tip load of at least 750 pounds when the ladder assembly is extended to the horizontal reach of 90 feet.

E-One disputes that the Metro 100 infringes the 536 and 915 Patents and offers several other defenses. First, E-One argues that the Metro 100 is not “configured to” support a tip load of 750 pounds based on the Court’s construction of “tip load,” which means “the weight applied to the tip of the ladder with downward force, not the rated capacity of the ladder.” (Doc. 158, p. 4). Alternatively, E-One argues that if the Metro 100 is “configured to” support the 750-pound tip load, then Pierce’s patents are invalid because they are anticipated by another fire truck, the Hinsdale quint. Testing on the Hinsdale quint,

¹ The NFPA standard states: “The aerial device shall be capable of sustaining a static load 1½ times its rated capacity in every position in which the aerial device can be placed when the apparatus is on a firm and level surface.” (Doc. 98-13, p. 12 at § 19.21.2)

manufactured in 2008, confirmed that its aerial ladder assembly was capable of supporting a tip load of 750 pounds with the ladder extended 90 feet horizontally.

Second, E-One argues the Claims asserted by Pierce are invalid because they do not satisfy the written description requirement of 35 U.S.C. § 112(a). E-One argues the written description requirement is not satisfied because (1) the specifications do not explain how to build the quint Moore claims to have invented; (2) the specifications attempt to claim the result of a fire assembly being configured to support a 750-pound tip load when the aerial ladder is extended to 90 feet horizontally, as opposed to the specifications claiming a method for doing so; and (3) the specifications fail to provide the required upper bounds for the claims.

Third, E-One claims that the 536 and 915 Patents are unenforceable due to the inequitable conduct of Pierce. E-One's inequitable conduct defense requires it to prove that a person with a duty of candor to the U.S. Patent and Trademark Office ("PTO") made an affirmative misrepresentation or omission to the PTO during prosecution of one of the patents, that the misrepresentation or omission was material to patentability, and the person who made the misrepresentation or omission did so with an intent to deceive the PTO.

C. This Lawsuit and the Preliminary Injunction

In February 2018, Pierce sued E-One in Wisconsin, and, in March 2018, E-One sued Pierce in this Court. The cases were consolidated in this Court, and the parties were reconfigured.

Pierce moved for a preliminary injunction, which was referred to the Magistrate Judge. After a hearing, the Magistrate Judge concluded Pierce showed a likelihood of

success on the merits and irreparable harm, and, therefore, he recommended the Court enter a preliminary injunction. (Doc. 44). In reaching his decision, the Magistrate Judge received evidence from the parties experts, but discounted the reports of E-One's experts because he had doubts as to their authenticity. E-One since retained a new expert, Dr. Joseph Rakow. This Court adopted the Report and Recommendation of the Magistrate Judge (Doc. 108) over the objections of E-One. E-One appealed to the Federal Circuit Court of Appeals, which affirmed entry of the preliminary injunction without an opinion. (Doc. 166).

E-One moved to dissolve the preliminary injunction in June 2019. The motion was again referred to the Magistrate Judge, who recommended E-One's motion be denied. (Doc. 265). The motion to dissolve was premised on discovery of the Hinsdale quint, which E-One argued constitutes prior art. The Magistrate Judge concluded E-One had not proved the Hinsdale quint constituted prior art. (Doc. 265). E-One objected to the Report and Recommendation. (Doc. 269).

DISCUSSION

Before the Court is a *Daubert* motion to exclude E-One's expert, cross motions for summary judgment, and the motion to dissolve the preliminary injunction. The Court will begin with the *Daubert* motion, and then address the arguments in the summary judgment motions in the most logical order. Finally, the Court will consider the Magistrate Judge's recommendation that the motion to dissolve the preliminary injunction be denied.

A. Pierce's Motion to Exclude Opinions of Dr. Joseph F. Rakow

1. Standard for Excluding Expert Testimony

Federal Rule of Evidence 702, which governs the admissibility of expert testimony, provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

“‘[T]he task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand’ is assigned to the district court.” *United Fire & Cas. Co. v. Whirlpool Corp.*, 704 F.3d 1338, 1341 (11th Cir. 2013) (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993)).

In *Rink v. Cheminova, Inc.*, 400 F.3d 1286 (11th Cir. 2005), the Eleventh Circuit explained:

To fulfil their obligation under *Daubert*, district courts must engage in a rigorous inquiry to determine whether: (1) the expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue. The party offering the expert has the burden of satisfying each of these three elements by a preponderance of the evidence.

Id. at 1291–92 (internal quotation marks omitted).

In assessing the reliability of a scientific expert's testimony, district courts should consider the following four factors: (1) whether the expert's methodology has been tested

or can be tested; (2) whether the theory or technique used by the expert has been subjected to peer review and publication; (3) whether there is a known or potential error rate of the methodology; and (4) whether the technique has been generally accepted in the relevant scientific community. *United Fire & Cas. Co.*, 704 F.3d at 1341 (citing *Daubert*, 509 U.S. at 593–94). “At the same time, the [Supreme] Court has emphasized that these factors are not exhaustive and are intended to be applied in a ‘flexible’ manner.” *Id.* (quoting *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 141 (1999)).

With respect to experts with technical rather than scientific knowledge the Supreme Court in *Kumho Tire* concluded that:

Daubert's general holding—setting forth the trial judge's general “gatekeeping” obligation—applies not only to testimony based on “scientific” knowledge, but also to testimony based on “technical” and “other specialized” knowledge. *See* Fed. Rule Evid. 702. We also conclude that a trial court *may* consider one or more of the more specific factors that *Daubert* mentioned when doing so will help determine that testimony's reliability. But, as the Court stated in *Daubert*, the test of reliability is “flexible,” and *Daubert's* list of specific factors neither necessarily nor exclusively applies to all experts or in every case. Rather, the law grants a district court the same broad latitude when it decides *how* to determine reliability as it enjoys in respect to its ultimate reliability determination.

526 U.S. at 141–42.

The objective of *Daubert's* gatekeeping requirement is to ensure “that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Id.* at 152. The gatekeeping role is “significant” because an “expert’s opinion ‘can be both powerful and quite misleading.’” *U.S. v. Frazier*, 387 F.3d 1244, 1260 (11th Cir. 2004) (quoting *Daubert*, 509 U.S. at 595). *Daubert* also reminds litigants that

“[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” 509 U.S. at 596.

2. Analysis

Pierce argues Dr. Rakow’s opinions and testimony should be excluded because they are both unreliable and unhelpful. First, Pierce argues that Dr. Rakow’s opinions are unhelpful to the trier of fact because Dr. Rakow relies on an incorrect claim construction of the term “coupled.” Second, Pierce argues Dr. Rakow’s opinions are unreliable because the errata² to his report provides only a bare-bones analysis that is insufficient to show his methodology is sound. The Court concludes neither argument has merit, so the *Daubert* motion must be denied.

Pierce argues Dr. Rakow’s opinions will not be helpful to the triers of fact because Dr. Rakow did not use the agreed upon claim construction of the term “coupled.” Pierce argues that the parties agreed the term “coupled” would mean “directly or indirectly attached,” as evidenced by Pierce’s counsel’s statements at the *Markman* hearing. (Doc. 156, p. 59) (“I also would like to point out that the parties had originally briefed the ‘coupling’ term but the parties have agreed now that that does not need to be argued, and the parties agree that ‘coupling’ could be directly or indirectly coupling....”). Because the

² Pierce previously moved to strike Dr. Rakow’s errata (Doc. 230) and argued in the *Daubert* motion that he should be excluded because his original report failed to disclose any meaningful analysis. (Doc. 253). The Magistrate Judge denied the motion to strike after the *Daubert* motion was filed, giving Pierce an opportunity to depose Dr. Rakow on the calculations in his errata report. (Doc. 268). Based on the Magistrate Judge’s ruling, Pierce’s argument that Dr. Rakow’s opinions should be excluded because his original report failed to disclose any meaningful analysis is moot.

parties had apparently agreed on the construction of “coupled,” the Court did not order any construction for that term. (Doc. 158). Dr. Rakow did not use this claim construction for “coupled” though, and instead construed “coupled” to mean “if displacement of one component is ‘not independent’ of displacement of the other component.” (Doc. 253, p. 4). Because this is not the agreed construction of “coupled,” Pierce argues Dr. Rakow’s opinions are unhelpful to the trier of fact.

E-One disputes Pierce’s characterization of their agreement for construction of the term “coupled.” Instead of agreeing that “coupled” means to be “directly or indirectly attached,” E-One argues that the parties only agreed to give the term its plain and ordinary meaning. (Doc. 270, p. 4). E-One argues that Dr. Rakow’s claim construction falls within the parties’ agreement to give “coupled” its plain and ordinary meaning, so his opinions will assist the trier of fact.

E-One is correct. According to the parties’ Joint Pre-Hearing Statement, the parties agreed that the term “coupled” “should be construed according to its plain and ordinary meaning.” (Doc. 154, p. 2). And Pierce has cited to no record evidence that the parties ever agreed to construe “coupled” to mean “directly or indirectly attached,” as it now argues. Further, the Court concludes that Dr. Rakow’s construction is not inconsistent with the plain and ordinary meaning of “coupled” to a person of ordinary skill in the art, so his opinion will not be unhelpful to the trier of fact. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005 (“[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art....”). That said,

Pierce is free to cross-examine Dr. Rakow on his construction of the term in an attempt to convince the jury that his opinion should be given little weight.

Turning to Dr. Rakow's methodology, the Court concludes Pierce failed to demonstrate it is unreliable. Dr. Rakow relied on mathematical formulas to reach his opinions, which are reliable. To the extent Pierce believes such formulas are based on incorrect data or assumptions, Pierce may cross-examine Dr. Rakow on his methodology.

So because the Court concludes Dr. Rakow's opinions are both helpful to the trier of fact and sufficiently reliable, the Court will deny Pierce's *Daubert* motion.

B. Motions for Summary Judgment

1. Summary Judgment Standard

Motions for summary judgment should be granted only when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any show there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) (internal quotation marks omitted); Fed. R. Civ. P. 56(c). The existence of some factual disputes between the litigants will not defeat an otherwise properly supported summary judgment motion; "the requirement is that there be no *genuine* issue of *material* fact." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The substantive law applicable to the claimed causes of action will identify which facts are material. *Id.* Throughout this analysis, the court must examine the evidence in the light most favorable to the nonmovant and draw all justifiable inferences in its favor. *Id.* at 255.

Once a party properly makes a summary judgment motion by demonstrating the absence of a genuine issue of material fact, whether or not accompanied by affidavits, the nonmoving party must go beyond the pleadings through the use of affidavits, depositions, answers to interrogatories and admissions on file, and designate specific facts showing there is a genuine issue for trial. *Celotex*, 477 U.S. at 324. The evidence must be significantly probative to support the claims. *Anderson*, 477 U.S. at 248–49.

This Court may not decide a genuine factual dispute at the summary judgment stage. *Fernandez v. Bankers Nat’l Life Ins. Co.*, 906 F.2d 559, 564 (11th Cir. 1990). “[I]f factual issues are present, the Court must deny the motion and proceed to trial.” *Warrior Tombigbee Transp. Co. v. M/V Nan Fung*, 695 F.2d 1294, 1296 (11th Cir. 1983). A dispute about a material fact is genuine and summary judgment is inappropriate if the evidence is such that a reasonable jury could return a verdict for the nonmoving party. *Anderson*, 477 U.S. at 248; *Hoffman v. Allied Corp.*, 912 F.2d 1379, 1383 (11th Cir. 1990). However, there must exist a conflict in substantial evidence to pose a jury question. *Verbraeken v. Westinghouse Elec. Corp.*, 881 F.2d 1041, 1045 (11th Cir. 1989).

2. Analysis

The parties raise four main arguments in their cross motions for summary judgment. First, E-One argues that Pierce’s 536 and 915 Patents are invalid for failure to satisfy the written description requirement in § 112(a). Second, E-One argues the Claims asserted by Pierce are anticipated by the Hinsdale quint. Third, Pierce argues E-One’s Metro 100 infringes the asserted Claims in the 536 and 915 Patents. And fourth, Pierce argues the evidence does not support E-One’s inequitable conduct defense. The Court concludes

disputed issues of fact prevent the Court from entering summary judgment on any of the arguments.

a. Written description requirement

Section 112 of the Patent Act contains a written description requirement separate from enablement. *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). The written description in a patent application must “clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed,” so courts consider “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* “This inquiry, as we have long held, is a question of fact.” *Id.*

E-One argues the asserted Claims fail to satisfy the written description requirement because (1) the Claims are not limited to a specific fire truck design, but instead claim every possible solution for designing a single rear axle quint with the claimed functional limitations; and (2) the asserted Claims’ lack of upper functional limitations is not supported by the written descriptions. To support these arguments, E-One cites to the expert opinion of Dr. Rakow, deposition testimony of Pierce’s expert, Dr. Thomas Kurfess, and the specification’s drawings and descriptions. Similarly, Pierce relies on the opinions of Dr. Kurfess to argue the written description requirement is satisfied, while also arguing Pierce is only claiming one specific design for a quint fire assembly.

Because resolution of this issue rests on resolving material factual disputes between the experts’ testimony, the Court cannot rule on this issue as a matter of law.

b. Anticipation and infringement

The next two arguments go hand-in-hand. E-One argues the asserted Claims are anticipated by the Hinsdale quint and, therefore, invalid. Pierce disputes that the Hinsdale quint anticipated the asserted Claims and argues E-One's Metro 100 infringes the asserted Claims—which E-One denies. The crux of both of these arguments turns on what it means for a fire assembly to be “configured to” support a tip load of 750 pounds with the aerial ladder extended to a horizontal reach of at least 90 feet.

Relying on tests conducted by Dr. Rakow, E-One argues the Hinsdale quint is prior art that anticipates the asserted Claims. In the tests, the aerial ladder on the Hinsdale quint—which was manufactured years before the 536 and 915 Patents issued—was extended to a horizontal reach of at least 90 feet and supported a 750-pound weight from the end of the ladder. It is undisputed, though, that the Hinsdale quint load charts instruct that the maximum horizontal reach of the aerial ladder is 71 feet 4.5 inches, with a rated tip load capacity of 396.9 pounds.

Although the Hinsdale quint test satisfied the tip load requirement of the asserted Claims,³ Pierce argues this does not matter because the Hinsdale quint ladder assembly was not “configured to” do so since such operation is beyond the fire assembly's safety limits and instructions of use. In making this argument, Pierce cites federal cases distinguishing “configured to” from “capable of,” with “configured to” being narrower in

³ Pierce argues the Hinsdale quint was manipulated during testing and takes issue with other aspects of the test, but none of those issues are relevant for this Order since other disputed facts preclude entry of summary judgment.

scope. (Doc. 262, pp. 6–7). To put it simply, Pierce argues that although the Hinsdale quint was “capable of” satisfying the tip load requirement, the Hinsdale quint was not “configured to” do so. And because the Hinsdale quint was not “configured to” satisfy the tip load requirement, it is not prior art that anticipates the asserted Claims.

On the other hand, Pierce argues the Metro 100 is “configured to” meet the tip load requirement in the asserted Claims. The Metro 100 has an NFPA rated tip load of 500 pounds when the aerial ladder is extended horizontally to 90 feet, and the safety instructions for the Metro 100 warn against exceeding this limitation. But because the NFPA standards require the fire assembly to support a tip load of 1.5 times its rated tip load, Pierce’s expert Dr. Kurfess opines the Metro 100 is “configured to” have a 750-pound tip load.⁴

E-One argues Pierce cannot have it both ways. Either the Hinsdale quint anticipates the asserted Claims—because it is capable of meeting the 750-pound tip load limitation despite its safety limits and instructions for use—or the Metro 100 does not infringe the asserted claims—even though it is capable of meeting the 750-pound tip load limitation despite its safety limits and instructions for use. Or as the Federal Circuit explained, “It is established law that that which infringes, if later, anticipates if earlier.” *Lisle Corp. v. A.J. Mfg. Co.*, 398 F.3d 1306, 1315 (Fed. Cir. 2005).

While the Court is persuaded by E-One’s argument, the disputed expert opinions—which provide the most relevant testimony regarding anticipation, infringement, and

⁴ The Hinsdale quint would not meet the 750-pound tip load based on the NFPA rating, according to Pierce, because its rated tip load of 396.9 pounds times 1.5 is only 600 pounds.

application of the NFPA standards—create a disputed issue of material fact this Court cannot resolve. The trier of fact will need to resolve this dispute.

c. Inequitable conduct

Pierce also argues it is entitled to summary judgment on E-One’s equitable defense of inequitable conduct. To succeed on this defense, E-One must show “the applicant misrepresented or omitted material information with the specific intent to deceive the PTO.” *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1287 (Fed. Cir. 2011). “In a case involving nondisclosure of information, clear and convincing evidence must show that the applicant *made a deliberate decision* to withhold a *known* material reference.” *Id.* at 1290 (emphasis in original). “[T]o meet the clear and convincing evidence standard, the specific intent to deceive must be ‘the single most reasonable inference able to be drawn from the evidence.’” *Id.*

It is not too much of a stretch to say that nearly every relevant fact of this equitable defense is in dispute. The parties do not agree as to who owed a duty to the PTO, whether the alleged prior art was material, and whether failing to disclose the allegedly material prior art was done with a specific intent to deceive. There is at least circumstantial evidence to support each element of the defense, contrary to Pierce’s assertions, which means there are factual disputes that must be resolved. So the Court concludes Pierce has not shown it is entitled to summary judgment on E-One’s equitable defense of inequitable conduct.

C. Motion to Dissolve Preliminary Injunction

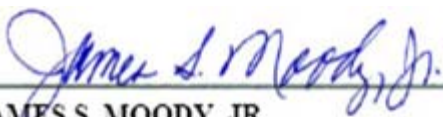
E-One also moved to dissolve the preliminary injunction based on discovery of prior art: the Hinsdale quint. But as explained above, it is far from clear whether the Hinsdale

quint constitutes prior art, given the factual disputes. So the Court concludes the status quo should be maintained until the trier of fact resolves the disputes surrounding whether the Hinsdale quint constitutes prior art.

Accordingly, it is ORDERED AND ADJUDGED that:

1. Defendants' Motion to Dissolve the November 5, 2018 Preliminary Injunction (Doc. 167) is DENIED.
2. The Report and Recommendation (Doc. 265) of the Magistrate Judge is adopted, confirmed, and approved to the extent it concludes the preliminary injunction should not be dissolved based on discovery of the Hinsdale quint, and is made a part of this order for all purposes, including appellate review.
3. Defendants' Motion for Summary Judgment that All Asserted Patent Claims Are Invalid (Docs. 249 and 264) is DENIED.
4. Plaintiffs' *Daubert* Motion to Exclude the Testimony and Opinions of Joseph F. Rakow, Ph.D. (Doc. 253) is DENIED.
5. Plaintiffs' Motion for Summary Judgment of Infringement and No Inequitable Conduct (Docs. 256 and 262) is DENIED.

DONE and **ORDERED** in Tampa, Florida, this 27th day of January, 2020.


JAMES S. MOODY, JR.
UNITED STATES DISTRICT JUDGE

Copies furnished to:
Counsel/Parties of Record